AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior version and listing of claims in the application:

Claim 1 (currently amended) A method for ~~immunizing a host mammal to produce a population of~~ optimizing the production of monoclonal antibodies that bind to ~~native~~ cell surface antigens representative of a particular cell type ~~that are heterologous to a host mammal~~, comprising:

~~introducing into the~~ immunizing a host mammal with a plurality of viable and intact cells of said particular cell type ~~prepared under conditions that preserve intact antigens,~~ that are heterologous to the host mammal wherein the surfaces of the cells are free of serum, and

generating a population of different monoclonal antibodies from said immunized mammal, wherein said population contains fewer non-representative monoclonal antibodies that bind to proteins not present on said particular cell type and more monoclonal antibodies that bind to intact cell surface antigens of said particular cell type as compared to a similarly sized population of different monoclonal antibodies generated from a like host mammal immunized with a plurality of like viable and intact cells whose surfaces are not free of serum.

Claim 2 (previously presented): The method of claim 1, wherein the cells have been cultured in a serum-free medium.

Claim 3 (previously presented): The method of claim 1, wherein the cells have been grown in the form of a monolayer.

Claim 4 (previously presented): The method of claim 1, wherein the cells have been grown in the form of aggregates.

Claim 5 (previously presented): The method of claim 1, wherein the cells have been grown on a biological or a non-biological state.

Claim 6 (previously presented): The method of claim 5, where in the biological substrate is selected from the group consisting of collagen, fibronectin, laminin and poly-lysine.

Claim 7 (withdrawn): The method of claim 5, wherein the non-biological substrate is selected from the group consisting of nitrocellulose, nylon, and polytetrafluoroethylene membrane.

Claim 8 (previously presented): The method of claim 1, wherein the cells are of embryonic or adult origin.

Claim 9 (previously presented): The method of claim 1, wherein the cells are of ectodermal, or endodermal or mesodermal origin.

Claims 10-14 (canceled)

Claim 15 (previously presented): The method of claim 1, wherein at least one of the monoclonal antibodies binds to an antigen on the cell surface.

Claims 16-17 (canceled)

Claim 18 (withdrawn): A method for producing lymphoid cells useful for immunizing a host mammal to produce monoclonal antibodies that bind to antigens representative of a specific cell type that are heterologous to the host mammal, comprising introducing into the mammal a plurality of viable and intact cells of said cell type, wherein the surfaces of the cells are free of serum.

Claim 19 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells have been cultured in a serum-free medium.

Claim 20 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells have been grown in the form of a monolayer.

Claim 21 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells have been grown in the form of aggregates.

Claim 22 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells have been grown on a biological or a non-biological substrate.

Claim 23 (withdrawn): The method for producing lymphoid cells according to claim 22, wherein the biological substrate is selected from the group consisting of collagen, fibronectin, laminin, and poly-lysine.

Claim 24 (withdrawn): The method for producing lymphoid cells according to claim 22, wherein the non-biological substrate is selected from the group consisting of nitrocellulose, nylon, and polytetrafluoroethylene membrane.

Claim 25 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells are of embryonic or adult origin.

Claim 26 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells are of ectodermal, or endodermal or mesodermal origin.

Claim 27 (withdrawn): The method for producing lymphoid cells according to claim 18, wherein the cells are selected from the group consisting of ASC, ESC, ROG, BUD, RED, NODD, BR516, RL-65, and NEP cells.

Claim 28 (previously presented): The method of claim 1, wherein said cells are prepared without adjuvant.

Claim 29 (previously presented): The method of claim 1, wherein said cells are a substantially homogenous population.

Claim 30 (previously presented): The method of claim 1, wherein said cells are from a primary culture.

Claim 31 (previously presented): The method of claim 1, wherein said cells are from cell lines that are established by subculturing cells from a primary culture.

Claim 32 (previously presented): The method of claim 1, wherein said cells are from cell lines that are established by cloning cells from a primary culture.

Claim 33 (previously presented): The method of claim 32, wherein the primary culture is derived from tissues selected from the group consisting of connective tissue elements, skeletal tissue, cardiac and smooth muscle, epithelial tissues, neural cells, endocrine cells, melanocytes, and hematopoietic cells.

Claim 34 (withdrawn): The method of claim 33, wherein the connective tissue elements are selected from the group consisting of fibroblast, bone and cartilage.

Claim 35 (previously presented): The method of claim 33, wherein the epithelial tissues are selected from the group consisting of liver, lung, breast, skin, bladder and kidney.

Claim 36 (withdrawn): The method of claim 33, wherein the neural cells are glia or neurons.

Claim 37 (withdrawn): The method of claim 33, wherein the endocrine cells are selected from the group consisting of adrenal, pituitary and pancreatic islet cells.

Claim 38 (new): The method of claim 1, wherein said host mammal is immunized by intraperitoneal injection.

Claim 39 (new): The method of claim 1, wherein said method comprises generating a population of antibody-producing hybridoma clones from said immunized mammal wherein said population of hybridoma clones provides fewer non-representative monoclonal antibodies that bind to proteins not present on said particular cell type and more monoclonal antibodies that bind to intact cell surface antigens of said particular cell type as compared to a similarly sized population of antibody-producing hybridoma clones generated from a like host mammal immunized with a plurality of like viable and intact cells whose surfaces are not free of serum.